

## Datasheet

Subject to technical alteration  
Issue date: 14.08.2020 • A110



## » APPLICATION

Electronic alternative to conventional pressure gauges: reliable monitoring and display of air pressure in ventilation and air conditioning.

## » SECURITY ADVICE – CAUTION



The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

Before mounting, commissioning and operation, make sure that the right pressure gauge has been selected in terms of measuring range, design and, due to the specific measuring conditions, the suitable wetted medium. Only install and maintain pressure gauges by qualified personnel authorized by the plant operator. Failure to comply with applicable regulations may result in serious personal injury and / or property damage.

## » NOTES ON DISPOSAL



As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

## » PRODUCT TESTING AND CERTIFICATION



### Declaration of conformity

The declaration of conformity of the products can be found on our website <https://www.thermokon.de/>.

## » USE ENCLOSURE WITH UV AND WEATHER RESISTANCE

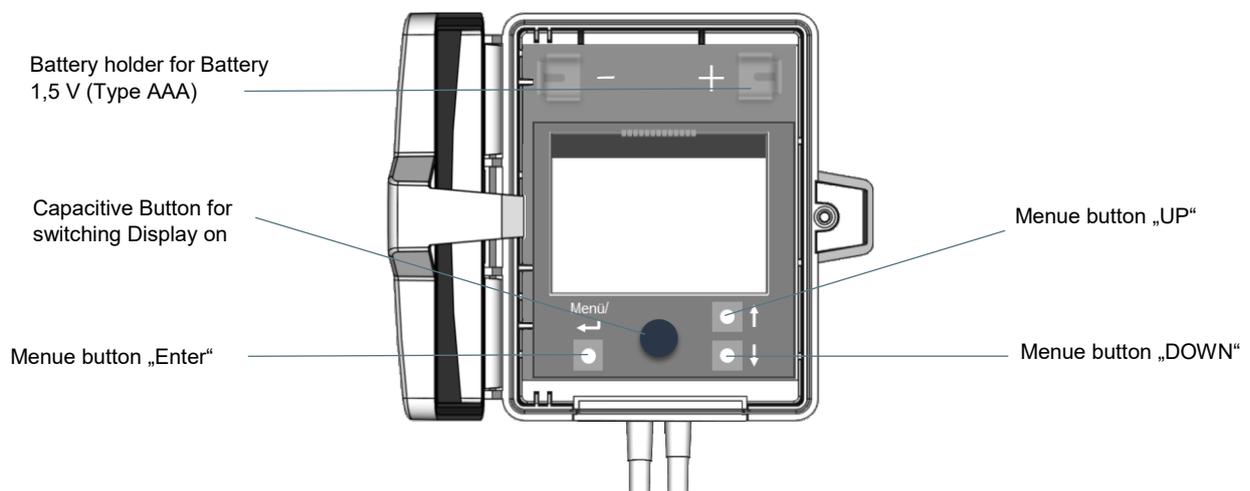
After some time, outdoor mounted plastics can lose their color and quality. Therefore, all USE housings are made of special white polycarbonate (PC). The light-stable colorants and additives are used to achieve optimum protection of the polymer while maintaining color stability. The titanium dioxide used is specially developed for polycarbonate and offers excellent UV protection through the reflection of the entire light spectrum including the UV component by 340 nm. This effectively counteracts the otherwise occurring photochemical polymer degradation. The colors stay full for a long time without fading. The material is also resistant to cold and frost.

## » TECHNICAL DATA

Measuring values	differential pressure
Medium	air, non-aggressive gases, non-flammable gases
Power supply	Battery 1,5 V (Type AAA), included in delivery
Power consumption	max. 60 mW (in operation)   max. 1 mW (standby)
Operating temp range	-10..+50 °C
Measuring range	0..2500 Pa
Accuracy pressure	±1,5 % of measuring range
Max. working overpressure	34 kPa
Display	LCD 29x35 mm with RGB backlight
Enclosure	enclosure USE-M, PC, pure white, cover PC, transparent, UV resistant
Protection	IP65 according to EN 60529
Connection mechanical	connection tube: PVC, soft
Ambient condition	max. 85% rH short term condensation
Delivery content	incl. battery (type AAA), 2 plastic duct flanges, 2 m PVC connection tube, incl. mounting base enclosure USE-M pure white, incl. universal mounting set (cover screw, self-drilling screws, dowels, spax screws and screw cover)

## » FUNCTION

When inserting the battery, observe the polarity according to the printing in the device.



» **COMMISSIONING**

```

Select battery
-> LR03 (Alkaline)
    FR03 (Lithium)
    
```

**Select battery**

To provide an approximate battery status message when the battery is about to go out, it is recommended to specify the type of battery. Standard delivery Alkaline.

**Battery status**

With a remaining capacity of <10%, the message "Battery status <10%" appears in the status line when the display is activated and the RGB backlight lights up yellow as long as the display is active. A battery change should be made as soon as possible.

Battery status < 10%			
Pressure	Pa	%	
	0	0	
Interval	Min	Threshold	Pa
	1	500	

Zero-point correction!			
Pressure	Pa	%	
	0	0	
Interval	Min	Threshold	Pa
	1	500	

**Zero-point correction!**

After the first commissioning or a battery change, a first zero correction is necessary. When the display is activated, the "Zero Correct!" Message appears in the status line, and the RGB backlight turns amber while the display is active

**Main menu | Zero-point correction**

With this selection, a zero point correction is executed directly. It is recommended to do the correction every 12 months. Before the zero point correction, both hoses must be disconnected from the pressure connections + and -. Otherwise the zero point correction will be executed incorrectly.

Main menu	
->Zero-point correction	
Threshold	
Interval	
Cancel	

Main menu	
Zero-point correction	
->Threshold	
Interval	
Cancel	

**Main menu | Threshold**

If the entered value is exceeded, the display flashes cyclically red. When the display is activated, "Limit Error" appears in the status bar. The error display remains until the pressure falls below the entered limit again. The limit value is adjustable in the range 0 .. + 2500 Pa.

**Main menu | Interval**

The device measures the pressure cyclically according to the entered interval. When reading by activating the display by pressing a button, a new measurement is performed immediately. Interval adjustable 1 | 2 | 5 | 10 | 15 minutes.

Main menu	
Zero-point correction	
Threshold	
->Interval	
Cancel	

Main menu	
Zero-point correction	
Threshold	
Interval	
->Cancel	

**Main menu | Cancel**

Exits the configuration menu and returns to the main screen. The menu will also exit automatically if no key is pressed for 10 seconds

**Main screen**

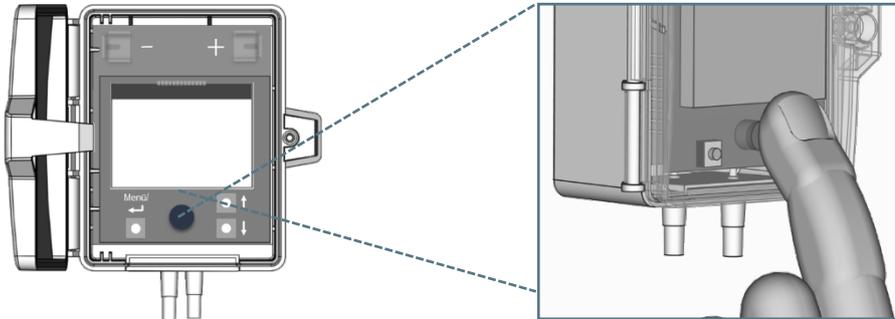
The main screen displays the measured value, proportion of the measured value in relation to the entered limit value, measuring interval and limit value.

Device status ok			
Pressure	Pa	%	
	0	0	
Interval	Min	Threshold	Pa
	1	500	

## » MOUNTING ADVICES

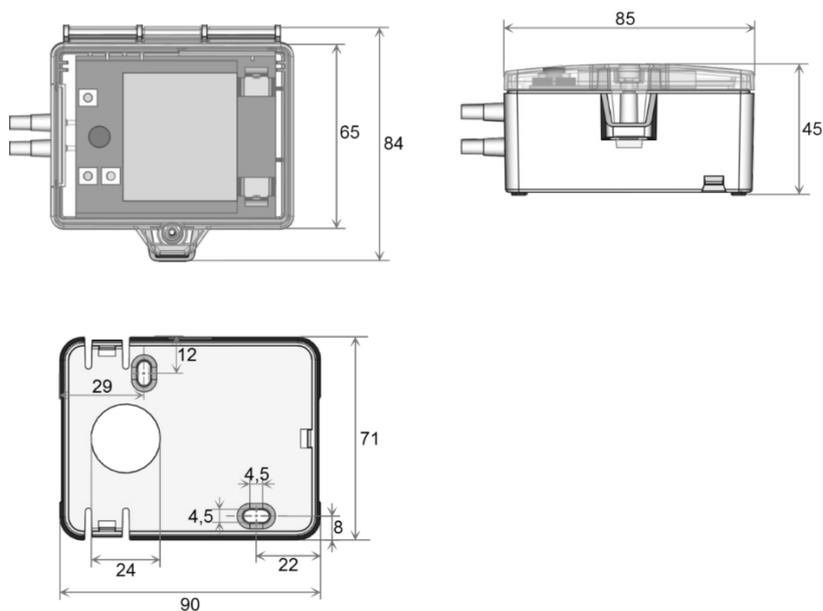
- A prerequisite for the operation is a proper installation of the battery as well as the pressurized connection line
- In order to connect the device, the process lines must be unpressurized
- Consider the suitability of the device for the medium to be measured
- Consider maximum pressures

## » OPERATION



There is a capacitive button under the cover (see picture). With an immediate touch on the cover the display can be turned on without the cover must be opened. The display remains on for 10 seconds (not adjustable).

## » DIMENSIONS (MM)



## » ACCESSORIES (INCLUDED IN DELIVERY)

Battery 1,5V AAA (Micro)  
 Mounting base enclosure USE-M  
 2 m PVC connection tube  
 KKS40 kit  
 · 2 plastic duct flanges · 4 mounting screws 4x20

Item No. 739351  
 Item No. 631228  
 Item No. 484268  
 Item No. 430135

Mounting kit universal  
 · Cover screw + screw cover · 2 Rawlplugs · 2 Screws (countersunk head) · 2 Screws (rounded head)

Item No. 698511

## » ACCESSORIES (OPTIONAL)

T-hose connector for pressure hoses  $\varnothing=4$  mm (10 pcs)  
 Adapter 90° angle for pressure hoses  $\varnothing=4$  mm  
 Metal duct connector MKS40  
 Metal duct connector MKS100

Item No. 668323  
 Item No. 668330  
 Item No. 265138  
 Item No. 302531